

1 CLAIMS:

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3 1. A mechanism for sensing the status of a media
4 stack tray which dispenses media to a printing device, the
5 media stack tray being associated with a dispensing device
6 which dispenses media from the media stack tray, the
7 mechanism comprising:

8 a probe having at least two positions such that
9 the probe is located in a first position when the media
10 stack tray has an empty status and is located in a second
11 position when the media stack tray has a loaded status,
12 the probe being mounted relative to the media stack tray
13 so that when the media stack tray has a loaded status the
14 media is normally located between the probe and the
15 dispensing device; and

16 a detector associated with the probe, the
17 detector for detecting the position of the probe.

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19 2. The mechanism of claim 1, wherein the probe
20 comprises:

21 a shaft which is pivotally mounted to the media
22 stack tray, the shaft being biased so as to locate the
23 probe in the first position when the media stack tray has
24 an empty status; and

25 a media contacting part extending from the
26 shaft,
27 said media contacting part bearing against the media stack
28 when the media stack tray has a loaded status so as to
29 locate the probe in the second position.

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31 3. The mechanism of claim 2 wherein the shaft is
32 gravitationally biased.

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2 4. The mechanism of claim 3 wherein the probe and
3 the detector are each located on the opposite side of the
4 media stack relative to the dispensing device.

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6 5. The mechanism of claim 3 wherein the detector
7 and the dispensing device are arranged on the same side of
8 the media stack.

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10 6. The mechanism of claim 2 wherein the probe is
11 mounted on a stack support platform of the media stack
12 tray, the stack support platform being biased so as to be
13 movable relative to the dispensing device so as to
14 maintain a substantially constant positional relationship
15 between the top of the media stack and the dispensing
16 device.

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18 7. A media stack tray for a printer, the media
19 stack tray for dispensing media from a media stack, the
20 media stack tray being associated with a dispensing device
21 which dispenses media from the media stack tray, the media
22 stack tray comprising:

23 a mechanism for sensing the status of the media
24 stack tray, the mechanism including:

25 a media contacting probe having plural positions
26 such that the media contacting probe is located in a first
27 position when the media stack tray has an empty status and
28 is located in a second position when the media stack tray
29 has a loaded status; and

30 a detector associated with the media contacting
31 probe, the detector for detecting the position of the
32 media contacting probe; and

1 a platform for supporting the media stack
2 wherein the media contacting probe is mounted to the
3 platform so that when the media stack tray has a loaded
4 status the media is normally located between the probe and
5 the dispensing device.
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